



Michigan Refining Division

Marathon Petroleum Company LP

1300 South Fort Street
Detroit, MI 48217
Telephone 313/843-9100

VIA FEDERAL EXPRESS

January 17, 2013

Ms. Wilhemina McLemore, District Supervisor
Michigan Department of Environmental Quality
Air Quality Division
3058 W. Grand Boulevard
Suite 2300
Detroit, MI 48202

MAILED

**Re: Continuous Emissions Monitoring System Reports for the Fourth Quarter 2012;
Marathon Petroleum Company LP – Michigan Refining Division**

Dear Ms. McLemore:

This report contains information and data related to continuous emissions monitoring systems (CEMS) at Marathon Petroleum Company LP's (MPC's) Michigan Refining Division (MRD) for the fourth quarter 2012. These reports are submitted pursuant to the General Provisions of the federal New Source Performance Standards (40 CFR 60.7) and Rule 1170 of the Michigan Air Pollution Control Rules. In addition, this report contains information required by the November 2005 First Revised Consent Decree, United States of America et. al. v. Marathon Ashland Petroleum LLC (presently known as Marathon Petroleum Company LP) (Civil Action No. 4:01CV-40119-PVG), as modified on March 31, 2008, June 30, 2010, and December 13, 2012. This report is divided into four attachments as follows:

Appendix A – CEMS downtime and excess emissions summary reports pursuant to 40 CFR 60.7(d) for all environmental analyzers at the Refinery. The CEMS did not exceed the 5% downtime limit. The East Plant SRU Thermal Oxidizer SO₂ and the FCCU Regenerator CO exceeded the 1% excess emission limit.

Appendix B - New Source Performance Standards (NSPS) Subpart J Alternate Monitoring Plan (AMP) data for seven streams: (1) Alky Spent Caustic H₂S, (2) CCR/SR Recycle H₂ H₂S, (3) DHT/Unifiner Recycle H₂ H₂S, (4) FCCU Disulfide off-gas H₂S, (5) CP Spent Caustic Drum Vent H₂S, (6) SR Aromatics Sump Vent H₂S, and (7) CCR Chlorsorb Vent SO₂.

The Refinery has five additional AMPs for which no data is being submitted: (1) The Crude Spent Caustic Drum was permanently shutdown, (2) The BT Recycle Hydrogen, which was part of the BT Platformer unit, was permanently shutdown in September 2005, (3) CCR Lockhopper Vent Gas which currently cannot physically be vented to the flare or fuel system, (4) Propylene Deethanizer off-gas, and (5) Alky Deethanizer off-gas were re-routed to a location that the refinery's fuel gas H₂S analyzer will receive the streams.

All AMPs were obtained in accordance with the NSPS General Provisions (40 CFR §60.13(i)).

Appendix C – Data from cylinder gas audits performed on CEMS located on the exhaust of the B&W Boiler, CCR Interheater, CCR Charge Heater, East Plant H2S, FCC Charge Heater, FCCU Regenerator, GOHT Heater, West Plant H2S, and the Zurn Boiler. Relative Accuracy Test Audits (RATAs) were conducted on the Coker Charge Heater on December 11, 2012, the Crude/Vacuum Heater on December 6, 2012, the DHT Heater on December 12, 2012, the East Plant SRU Thermal Oxidizer on November 28, 2012, the FCC Charge Heater on December 19, 2012, the New Vacuum Heater on December 11, 2012, and the North Plant SRU Thermal Oxidizer on December 14, 2012.

Appendix D – Excess Emission Report for the East Plant SRU Thermal Oxidizer SO₂ and the FCCU Regenerator CO exceedences of 1% excess emissions.

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information in Appendices A through D of this submittal is, to the best of my knowledge and belief, true, accurate, and complete. Please contact Tabetha Daum at (313) 297-4701 if you have any questions concerning this submittal.

Sincerely,

Marathon Petroleum Company LP

By: MPC Investment LLC, General Partner


Mr. C.T. Case, Deputy Assistant Secretary

Attachments

cc: Technical Programs Unit - MDEQ: AQD – c/o Karen Kajiya-Mills – *Federal Express* ✓
 Chief, Environmental Enforcement Section, Environment and Natural Resources Division, U.S. DOJ - *Federal Express* ✓
 U.S. EPA, Director of Air Enforcement Division c/o Matrix Environmental and Geotechnical– *Federal Express* ✓
 Air and Radiation Division, U.S. EPA Region 5 – *Federal Express* ✓
 Office of Regional Counsel, U.S. EPA Region 5 – *Federal Express* ✓

Appendix A

CEMS Downtime and Excess Emissions Summary Reports

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: Alky Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: Alky Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 400 ppm* 0.028 lbs/MMBTU**

Emission Unit: BW Boiler (CO)

Average Time: *24 hour average **annual rolling average

Total Operating Hours of Emission Unit: 1958.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>1.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.26</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.20 lbs/MMBTU* 0.05 lbs/MMBTU**

Emission Unit: BW Boiler (NO_x)

Average Time: *24 hour average **annual rolling average

Total Operating Hours of Emission Unit: 1958.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>1.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.26</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: none

Emission Unit: BW Boiler (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1958.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>1.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.26</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: Coker Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.20</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Uras 26 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.01 lbs/MMBTU

Emission Unit: Coker Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.20</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: Coker Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.20</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: CCR Charge Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.013 lbs/MMBTU

Emission Unit: CCR Charge Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: CCR Charge Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: CCR Interheater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x **CO** CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Uras 26 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.013 lbs/MMBTU

Emission Unit: CCR Interheater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.22</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: CCR Interheater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.20</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: Crude/Vacuum Charge Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1529 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.46</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Uras 26 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.01 lbs/MMBTU

Emission Unit: Crude/Vacuum Charge Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1529 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.46</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: none

Emission Unit: Crude/Vacuum Charge Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1529 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.46</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: DHT Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Uras 26 (CO)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.02 lbs/MMBTU

Emission Unit: DHT Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: none

Emission Unit: DHT Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: PGC2000

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 160 ppm

Emission Unit: East Plant Fuel Gas NSPS Heaters

Average Time: 3 hour average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>15.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>12.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>12.00</u> hrs	2. Total Duration	<u>19.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.65</u> %	3. Percent of Total CEM Downtime	<u>1.03</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO2 NOx CO CO2 O2 TRS H2S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: LIMAS-11-UV

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB Advance Optima

Emission Limit: 250 ppm & 175 ppm*

Emission Unit: East Plant SRU Thermal Oxidizer (SO2)

Average Time: 12 hr ave & *12 month rolling ave

Total Operating Hours of Emission Unit: 1789 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>53.00</u> hrs	C. QA Calibration	<u>19.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>53.00</u> hrs	2. Total Duration	<u>23.00</u> hrs
3. Percent of Total Excess Emissions	<u>2.96</u> %	3. Percent of Total CEM Downtime	<u>1.29</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: MAGNOS 106/206

Facility: Marathon Petroleum Company LP

Manufacturer: ABB Advance Optima

1300 South Fort Street

Detroit, MI 48217

Emission Limit: none

Emission Unit: East Plant SRU Thermal Oxidizer (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1789 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>19.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>23.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.29</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.02 lbs/MMBTU

Emission Unit: FCCU Charge Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>4.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>8.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.43</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: FCCU Charge Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>1.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.27</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 80 ppm

Average Time: 7 day average

Emission Unit: FCCU Regenerator (NO_x)

Emission Limit: 70 ppm

Average Time: 365 day average

Total Operating Hours of Emission Unit: 1566.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>19.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>23.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.47</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 500 ppm

Emission Unit: FCCU Regenerator (CO)

Average Time: one hour average

Total Operating Hours of Emission Unit: 1566.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>71.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>19.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>71.00</u> hrs	2. Total Duration	<u>23.00</u> hrs
3. Percent of Total Excess Emissions	<u>4.53</u> %	3. Percent of Total CEM Downtime	<u>1.47</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: (SO2) NOx CO CO2 O2 TRS H2S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (SO2)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Unit: FCCU Regenerator (SO2)

Emission Limit: 50 ppm

Average Time: 7 day average

Emission Limit: 25 ppm

Average Time: 365 day average

Total Operating Hours of Emission Unit: 1566.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>19.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>23.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.47</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 16 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: FCCU Regenerator (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1566.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>19.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>23.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.47</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Lighthawk 560

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Teledyne Monitor Labs

Emission Limit: 20% opacity

Emission Unit: FCCU Regenerator

Average Time: 6 minute average

Total Operating Hours of Emission Unit: 1566.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>1.30</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>1.30</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.08</u> %	3. Percent of Total CEM Downtime	<u>0.45</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: GOHT Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Uras 26 (CO)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.02 lbs/MMBTU

Emission Unit: GOHT Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non-Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>3.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>4.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>7.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>0.38</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non-Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>3.00</u> hrs																				
D. Other Known Causes	<u>4.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: GOHT Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1848 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO2 NOx CO CO2 O2 TRS H2S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: LIMAS-11-UV

Facility: Marathon Petroleum Company LP

Manufacturer: ABB Advance Optima

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 250 ppm* 100 ppm**

Emission Unit: North Plant SRU Thermal Oxidizer (SO2)

Average Time: *12 hr ave **12 month rolling ave

Total Operating Hours of Emission Unit: 1776.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>5.00</u> hrs	C. QA Calibration	<u>4.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>5.00</u> hrs	2. Total Duration	<u>8.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.28</u> %	3. Percent of Total CEM Downtime	<u>0.45</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: MAGNOS 106/206

Facility: Marathon Petroleum Company LP

Manufacturer: ABB Advance Optima

1300 South Fort Street

Detroit, MI 48217

Emission Limit: none

Emission Unit: North Plant SRU Thermal Oxidizer (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1776.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>4.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>8.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.41</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: Vacuum Heater (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1519.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>11.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>15.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.99</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Uras 26 (CO)

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.01 lbs/MMBTU

Emission Unit: Vacuum Heater (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1519.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.26</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: Vacuum Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1519.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.26</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: Fourth 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LP

Manufacturer: Powertrol

1300 South Fort Street

Detroit, MI 48217

Emission Limit: Pilot Light Present

Emission Unit: Vents to Alkylation Unit Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 1638 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>3.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.43</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: Fourth 2012

Monitor Model: 2KU-531-0076-CNN-02-NNN

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: THERMO SENSORS

Emission Limit: Pilot Light Present

Emission Unit: Vents to Coker Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2143.5 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.19</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: Fourth 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LP

Manufacturer: Powertrol

1300 South Fort Street

Detroit, MI 48217

Emission Limit: Pilot Light Present

Emission Unit: Vents to CP Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2120 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>8.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>8.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: Fourth 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Emission Unit: Vents to Crude Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 1556 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>18.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>2.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>20.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.29</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: Fourth 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Emission Unit: Vents to Unifiner Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2113 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>53.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>53.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>2.51</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: PGC2000

Facility: Marathon Petroleum Company LP

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 160 ppm

Emission Unit: West Plant Fuel Gas NSPS Heaters

Average Time: 3 hour average

Total Operating Hours of Emission Unit: 1952 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>3.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>4.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>7.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.36</u> %	3. Percent of Total CEM Downtime	<u>0.36</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.2 lbs/MMBTU

Emission Unit: Zurn Boiler (NO_x)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1748 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non-Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>1.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>6.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.40</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x **CO** CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: URAS 26 (CO)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.1 lbs/MMBTU

Emission Unit: Zurn Boiler (CO)

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 1748 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.23</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: Fourth 2012

Monitor Model: Magnos 2 (O₂)

Facility: Marathon Petroleum Company LP
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: Zurn Boiler (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 1748 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>4.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.23</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Appendix B

New Source Performance Standards (NSPS) Subpart J Alternate Monitoring Plan (AMP) Data

Complex 3 (RADAR) - B		Complex 3 (RADAR) - C		Complex 4 (AMP Sheet) - D		Complex 4 (AMP Sheet) - E	
Most Recent Sample Dates	FCCU Disulfide off-gas H ₂ S ppm 2 x year	Most Recent Sample Dates	CP Spent Caustic Drum Vent H ₂ S ppm 2 x year	Most Recent Sample Dates	SR Aromatics Sump Vent H ₂ S ppm 2 x year	Most Recent Sample Dates	CCR Chlorosorb Vent SO ₂ ppm 2 x year
7/4/2012	0	7/4/2012	0	9/5/2012	0	9/5/2012	0
11/7/2012	4	11/4/2012	0	12/27/2012	0	12/26/2012	0

Complex 2 (AMP Sheet) - A		Complex 4 (Lab Data)		Complex 2 (Lab Data)	
Alky Spent Caustic H ₂ S ppm		CCR/SR Recycle H ₂ S ppm		DHT/Unifiner Recycle H ₂ H ₂ S ppm	
When flaring		2 x year		5 x week	
Date		14RHH2S.LDd		07RHH2S.LD	
10-1-2012	Unit down	Unit down		Unit down	
10-2-2012	Unit down	Unit down		Unit down	
10-3-2012	Unit down	Unit down		Unit down	
10-4-2012	Unit down	Unit down		Unit down	
10-5-2012	Unit down	Unit down		Unit down	
10-6-2012	Unit down	Unit down		Unit down	
10-7-2012	Unit down	Unit down		Unit down	
10-8-2012	Unit down	Unit down		Unit down	
10-9-2012	Unit down	Unit down		Unit down	
10-10-2012	Unit down	Unit down		Unit down	
10-11-2012	Unit down	Unit down		Unit down	
10-12-2012	Unit down	Unit down		Unit down	
10-13-2012	Unit down	Unit down		Unit down	
10-14-2012	Unit down	Unit down		Unit down	
10-15-2012	Unit down	Unit down		Unit down	
10-16-2012	Unit down	Unit down		Unit down	
10-17-2012	Unit down	Unit down		Unit down	
10-18-2012	Unit down	Unit down		Unit down	
10-19-2012	Unit down	Unit down		Unit down	
10-20-2012	Unit down	Unit down		Unit down	
10-21-2012	Unit down	Unit down		Unit down	
10-22-2012	Unit down	Unit down		Unit down	
10-23-2012	Unit down	Unit down		Unit down	
10-24-2012	Unit down	Unit down		Unit down	
10-25-2012	Unit down	Unit down		Unit down	
10-26-2012	Unit down	Unit down		Unit down	
10-27-2012	Unit down	<1		Unit down	
10-28-2012	Unit down	Unit down		Unit down	
10-29-2012	Unit down	Unit down		Unit down	
10-30-2012	Unit down	Unit down		Unit down	
10-31-2012	Unit down	Unit down		Unit down	
11-1-2012	Unit down	0		Unit down	
11-2-2012	Unit down	<1		Unit down	
11-3-2012	Unit down	<1		Unit down	
11-4-2012	Unit down	--		Unit down	
11-5-2012	0	<1		Unit down	
11-6-2012	0	0		Unit down	
11-7-2012	--	<1		0	
11-8-2012	0	<1		0	
11-9-2012	--	<1		0	
11-10-2012	0	<1		--	
11-11-2012	0	<1		10	
11-12-2012	0	<1		0	
11-13-2012	--	<1		0	
11-14-2012	--	<1		0	
11-15-2012	--	<1		--	
11-16-2012	0	<1		<1	
11-17-2012	0	--		--	
11-18-2012	0	--		<1	
11-19-2012	0	<1		<1	
11-20-2012	0	<1		<1	
11-21-2012	0	--		--	
11-22-2012	0	<1		--	
11-23-2012	0	<1		<1	
11-24-2012	0	<1		<1	
11-25-2012	0	<1		--	
11-26-2012	0	<1		<1	
11-27-2012	0	<1		<1	
11-28-2012	0	--		<1	
11-29-2012	0	<1		--	
11-30-2012	0	<1		0	
12-1-2012	0	<1		0	
12-2-2012	0	<1		0	
12-3-2012	--	0		0	
12-4-2012	--	<1		<1	
12-5-2012	0	<1		--	
12-6-2012	0	<1		0	
12-7-2012	0	<1		0	
12-8-2012	0	<1		0	
12-9-2012	0	<1		0	
12-10-2012	0	<1		0	
12-11-2012	0	<1		0	
12-12-2012	0	<1		0	
12-13-2012	0	<1		0	
12-14-2012	0	<1		0	
12-15-2012	0	<1		0	
12-16-2012	0	<1		0	
12-17-2012	0	<1		0	
12-18-2012	0	<1		0	
12-19-2012	0	<1		0	
12-20-2012	0	0		0	
12-21-2012	0	0		--	
12-22-2012	0	0		0	
12-23-2012	0	0		0	
12-24-2012	0	0		0	
12-25-2012	--	0		0	
12-26-2012	0	0		0	
12-27-2012	--	0		0	
12-28-2012	0	0		0	
12-29-2012	0	3655		0	
12-30-2012	0	0		0	
12-31-2012	0	0		0	

*No flaring took place at this time.

Appendix C

Cylinder Gas Audit Information

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: B&W Boiler CEMS

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas 11 (NOx), Magnos 106 (O2), Uras 14 (CO)

Constituents monitored (w/ranges): NOx (0-500), CO (0-500), O2 (0-10%)

Date CGA performed: 10/13/2012

Performed by: Glen Senczyszyn

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	NO	low	EB0025464	02/02/13	120	ppm
	CO				125	ppm
76-188-219	O2	low	0208HL12	02/14/15	5.55	%
76-188-231	NO	mid	0915HD11	09/30/13	272	ppm
	CO				274	ppm
76-188-215	O2	mid	EB0023341	06/24/13	8.99	%

Low-level CGA:

Start time	End time	NO	CO	O2
15:18	15:29	116.6	125	5.55
15:29	15:42	117.0	125	5.55
15:42	15:54	117.0	125	5.55
Average		116.9	125	5.55
Cal gas value		120.0	125	5.55
CGA accuracy		2.6%	0.0%	0.0%

High-level CGA:

Start time	End time	NO	CO	O2
15:54	16:07	268	273	8.99
16:07	16:19	268	273	8.99
16:19	16:34	268	273	8.99
Average		268.0	273	8.99
Cal gas value		272.0	274	8.99
CGA accuracy		1.5%	0.4%	0.0%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: CCR Interheater

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas11 (NOx), Uras 26 (CO), and Magnos 106 (O2)

Constituents monitored (w/ranges): NOx (0-100), CO low (0-50), CO high (0-500), and O2 (0-10%)

Date CGA performed: 12/18/2012

Performed by: Doug Pek and Dave Wright

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-000-074	NO	low	EB0019527	06/27/14	24.1	ppm
	CO low	low			12.9	ppm
76-000-069	CO high	low	CC275924	05/15/15	122.0	ppm
	O2	low			4.96	%
76-000-066	NO	mid	EB0025654	06/29/14	54.5	ppm
	CO low	mid			27.6	ppm
76-188-165	CO high	mid	EB0030987	06/27/15	277	ppm
	O2	mid			9.03	%

Low-level CGA:

Start time	End time	NOx	CO (low)	CO (high)	O2
15:19	15:33	25.1	13.0	122.6	4.89
15:33	15:45	25.0	12.9	122.5	4.89
15:45	15:58	24.9	13.0	122.7	4.89
Average		25.0	12.9	122.6	4.89
Cal gas value		24.1	12.9	122.0	4.96
CGA accuracy		3.7%	0.3%	0.5%	1.4%

Mid-level CGA:

Start time	End time	NOx	CO (low)	CO (high)	O2
16:07	16:19	54.2	27.8	273.2	9.01
16:19	16:32	54.2	27.8	273.3	9.10
16:32	16:45	54.3	27.8	273.3	9.10
Average		54.2	27.8	273.3	9.07
Cal gas value		54.5	27.6	277.0	9.03
CGA accuracy		0.5%	0.7%	1.3%	0.4%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: CCR Charge Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas11 (NOx), Uras 26 (CO), and Magnos 106 (O2)

Constituents monitored (w/ranges): NOx (0-100), CO high (0-500), and O2 (0-10%)

Date CGA performed: 12/18/2012

Performed by: Doug Pek and Dave Wright

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-000-074	NO	low	EB0019527	06/27/14	24.1	ppm
76-000-069	CO	low	CC275924	05/15/15	122.0	ppm
	O2	low			4.96	%
76-000-066	NO	mid	EB0025654	06/29/14	54.5	ppm
76-188-165	CO	mid	EB0030987	06/27/15	277	ppm
	O2	mid			9.03	%

Low-level CGA:

Start time	End time	CO	NOx	O2
12:50	13:03	123	23.3	4.82
13:03	13:15	123	23.1	4.82
13:15	13:27	123	22.9	4.81
Average		123	23.1	4.82
Cal gas value		122	24.1	4.96
CGA accuracy		0.8%	4.1%	2.9%

Mid-level CGA:

Start time	End time	CO	NOx	O2
13:32	13:44	273	53.0	8.84
13:44	13:57	273	53.1	8.83
13:57	14:09	273	53.0	8.83
Average		273	53.0	8.83
Cal gas value		277	54.5	9.03
CGA accuracy		1.4%	2.7%	2.2%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: East Plant Fuel Gas

Analyzer Manufacturer: ABB

Analyzer model #'s: 2000GC

H2S (0-300)

Date CGA performed: 12/11/2012

Performed by: Glen Senczyszyn

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-000-087	H2S	low	CC99928	09/25/13	81.9	ppm
	COS				81.9	ppm
	CS2				82.0	ppm
	CH3SH				81.9	ppm
76-000-086	H2S	mid	CC20436	07/10/13	180	ppm
	COS				180.0	ppm
	CS2				180.0	ppm
	CH3SH				180.0	ppm

Low-level CGA:

Start time	End time	H2S	COS	CS2	CH3SH
15:49	16:00	84.3	86.3	91.6	86.3
16:00	16:11	84.1	86.5	91.6	87.7
16:11	16:22	84.9	86.8	91.5	87.9
Average		84.4	86.5	91.6	87.3
Cal gas value		81.9	81.9	82.0	81.9
CGA accuracy		3.1%	5.7%	11.7%	6.6%

Mid-level CGA:

Start time	End time	H2S	COS	CS2	CH3SH
16:22	16:33	175.0	179.0	181.0	181.0
16:33	16:44	178.0	180.0	181.0	181.0
16:44	16:55	179.0	180.0	181.0	181.0
Average		177.3	179.7	181.0	181.0
Cal gas value		180.0	180.0	180.0	180.0
CGA accuracy		1.5%	0.2%	0.6%	0.6%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: FCC Charge Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: URAS 14 (CO) and Magnos 106 (O2)

Constituents monitored (w/ranges): CO (0-500) and O2 (0-10%)

Date CGA performed: 11/7/2012

Performed by: Doug Pek and Moses Sears

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-166	CO	low	CC275912	06/28/13	124	ppm
	O2				5.02	%
76-188-165	CO	mid	EB0015531	06/27/15	278	ppm
	O2				9.04	%

Low-level CGA:

Start time	End time	CO	O2
10:23	10:32	123.8	5.14
10:32	10:41	123.7	5.14
10:41	10:50	123.8	5.14
Average		124	5.14
Cal gas value		124	5.02
CGA accuracy		0.2%	2.4%
CGA difference (ppm)		-0.2	0.1

Mid-level CGA:

Start time	End time	CO	O2
11:03	11:12	274.5	9.15
11:12	11:22	274.6	9.15
11:22	11:31	274.6	9.15
Average		275	9.15
Cal gas value		278	9.04
CGA accuracy		1.2%	1.2%
CGA difference (ppm)		-3.4	0.1

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: FCCU Regenerator exhaust CEMS

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas 11 (SO2/NOx), Magnos 106 (O2), Uras 14 (CO/CO2)

Constituents monitored (w/ranges): SO2 (0-200), NOx (0-200), CO (0-1000), CO2 (0-20%), O2 (0-10%)

Date CGA performed: 12/12/2012

Performed by: Doug Pek and Eric Justa

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentratio	Units
76-200-300	SO2	low	CC275896	4/27/13	49.8	ppm
	NO	low			51.1	ppm
	CO	low			248	ppm
	CO2	low			6.61	%
76-188-219	O2	low	CC288638	10/20/14	5.52	%
76-500-600	SO2	mid	EB0028863	6/1/14	110	ppm
	NO	mid			113	ppm
	CO	mid			543	ppm
	CO2	mid			12.1	%
76-188-215	O2	mid	EB0023341	06/24/13	8.99	%
	NO2	mid			90.9	ppm

Low-level CGA:

Start time	End time	SO2	NO	CO	CO2	O2
20:03	20:19	46.8	51.3	256	6.67	5.62
20:20	20:37	47.5	51.3	256	6.67	5.60
20:37	20:57	47.5	51.2	256	6.67	5.59
Average		47.3	51	256	6.67	5.60
Cal gas value		49.8	51.1	248.0	6.61	5.52
CGA accuracy		5.1%	0.3%	3.2%	0.9%	1.5%

Mid-level CGA:

Start time	End time	SO2	NO	CO	CO2	O2
20:57	21:15	110.5	114.9	544	12.1	9.17
21:15	21:31	109.4	114	545	12.1	9.18
21:32	21:47	109.9	114.2	545	12.1	9.18
Average		109.9	114	545	12.1	9.18
Cal gas value		110	113.0	543	12.1	8.99
CGA accuracy		0.1%	1.2%	0.3%	0.0%	2.1%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: GOHT Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas11 (NOx), Uras 26 (CO), and Magnos 106 (O2)

Constituents monitored (w/ranges): NOx (0-100), CO low (0-50), CO high (0-500), and O2 (0-10%)

Date CGA performed: 12/11/2012

Performed by: Glen Senczysztn

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-000-074	NO	low	EB0026852	06/27/14	25.3	ppm
	CO low	low			12.9	ppm
76-000-069	CO high	low	EB0019491	07/06/15	125.0	ppm
	O2	low			4.96	%
76-000-066	NO	mid	EB0022445	05/22/14	54.2	ppm
	CO low	mid			28.8	ppm
76-188-165	CO high	mid	EB0003827	08/22/13	275	ppm
	O2	mid			9.03	%

Low-level CGA:

Start time	End time	NO	CO low	CO high	O2
10:58	11:11	25.9	13.09	125	4.96
11:11	11:23	25.6	13.00	125	4.96
11:23	11:35	25.4	13.00	125	4.96
Average		25.6	13.0	125.0	4.96
Cal gas value		25.3	12.9	125.0	4.96
CGA accuracy		1.32%	1.01%	0.00%	0.00%

Mid-level CGA:

Start time	End time	NO	CO low	CO high	O2
11:45	11:57	54.2	28	274	8.98
11:57	0:09	54.6	27.9	274	8.98
0:10	0:22	54.7	27.9	274	8.98
Average		54.5	27.9	274.0	9.0
Cal gas value		54.2	28.8	275	9.03
CGA accuracy		0.55%	3.01%	0.36%	0.55%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: West Plant Fuel Gas

Analyzer Manufacturer: ABB

Analyzer model #'s: 2000GC

H2S (0-300)

Date CGA performed: 12/15/2012

Performed by: Doug Pek and Eric Justa

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-000-087	H2S	low	CC99928	09/25/13	81.9	ppm
	COS				81.9	ppm
	CS2				82.0	ppm
	CH3SH				81.9	ppm
76-000-086	H2S	mid	CC253034	07/10/13	180	ppm
	COS				180.0	ppm
	CS2				180.0	ppm
	CH3SH				180.0	ppm

Low-level CGA:

Start time	End time	H2S	COS	CS2	CH3SH
9:47	9:58	86.9	82.3	85.2	83.4
9:58	10:09	86.9	82.1	85.0	83.6
10:09	10:21	87.4	82.2	85.3	83.9
Average		87.1	82.2	85.2	83.6
Cal gas value		81.9	81.9	82.0	81.9
CGA accuracy		6.3%	0.4%	3.9%	2.1%

Mid-level CGA:

Start time	End time	H2S	COS	CS2	CH3SH
10:21	10:32	189.0	183.0	180.0	185.0
10:32	10:42	189.0	183.0	180.0	185.0
10:42	10:54	189.0	183.0	180.0	185.0
Average		189.0	183.0	180.0	185.0
Cal gas value		180.0	180.0	180.0	180.0
CGA accuracy		5.0%	1.7%	0.0%	2.8%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: Zurn Boiler

Analyzer Manufacturer: ABB

Analyzer Model Number's: ABB Limas 11 (NOx), ABB Uras 14 (CO), and ABB Magnos 106 (O2)

Serial Number's: 3.341196.1 (NOx), 3.341671.1 (CO), and 3.341670.1 (O2)

Constituents monitored (w/ranges): NOx (0-500), CO high range (0-500), CO low range (0-50) and O2 (0-10%)

Date CGA performed: 12/17/2012

Performed by: Doug Pek

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	NOx	low	EB0025464	02/02/14	120	ppm
	CO high range				125	ppm
76-188-259	CO low range		EB0033563	09/23/14	11.9	ppm
	O2				5.00	%
76-188-231	NOx	mid	EB0025213	01/07/13	270	ppm
	CO high range				275	ppm
76-188-269	CO low range		EB0033318	09/23/14	28.80	ppm
	O2				8.90	%

Low-level CGA:

Start time	End time	NOx	CO high range	CO low range	O2
13:09	13:20	117	123.3	12.40	5.00
13:20	13:30	116	123.3	12.20	5.00
13:31	13:41	116	123.3	12.00	5.00
Average		116	123	12.2	5.00
Cal gas value		120	125	11.9	5.00
CGA accuracy		3.1%	1.4%	2.5%	0.0%

Mid-level CGA:

Start time	End time	NOx	CO high range	CO low range	O2
13:48	13:58	265	271.8	26.6	8.90
13:58	14:09	265	271.8	26.8	8.90
14:09	14:20	265	271.8	26.8	8.90
Average		265	272	26.7	8.90
Cal gas value		270	275	28.8	8.90
CGA accuracy		1.9%	1.2%	7.2%	0.0%

Appendix D

Excess Emission Report

Excess Emission Report
Fourth Quarter 2012
Marathon Petroleum Company LP - Michigan Refining Division
Time Periods are Approximate

SRU Thermal Oxidizer

Start Date/Time*	End Date/Time*	Duration of Excess Emissions (hrs)	Equipment	Emissions (ppm 12 hr ave)**	Cause	Corrective Action		
11/3/12 7:00 PM	11/3/12 8:00 PM	1	SRU Thermal Oxidizer	266.85	During start-up of the refinery from the plant-wide shutdown the sulfur plant operations were interrupted when hydrocarbon pressured up the Sour Water Flash Drum sending hydrocarbon to various vessels within the sulfur plant. Hydrocarbon and water collected in the flash drum from start-up of the various units, no particular source was identified as the major contributor to the incident.	The startup was performed per procedure.		
11/3/12 8:00 PM	11/3/12 9:00 PM	1	SRU Thermal Oxidizer	299.64				
11/3/12 9:00 PM	11/3/12 10:00 PM	1	SRU Thermal Oxidizer	331.42				
11/3/12 10:00 PM	11/3/12 11:00 PM	1	SRU Thermal Oxidizer	361.34				
11/3/12 11:00 PM	11/4/12 12:00 AM	1	SRU Thermal Oxidizer	388.31				
11/4/12 12:00 AM	11/4/12 1:00 AM	1	SRU Thermal Oxidizer	404.83				
11/4/12 1:00 AM	11/4/12 2:00 AM	1	SRU Thermal Oxidizer	418.33				
11/4/12 2:00 AM	11/4/12 3:00 AM	1	SRU Thermal Oxidizer	421.95				
11/4/12 3:00 AM	11/4/12 4:00 AM	1	SRU Thermal Oxidizer	415.54				
11/4/12 4:00 AM	11/4/12 5:00 AM	1	SRU Thermal Oxidizer	406.06				
11/4/12 5:00 AM	11/4/12 6:00 AM	1	SRU Thermal Oxidizer	386.90				
11/4/12 6:00 AM	11/4/12 7:00 AM	1	SRU Thermal Oxidizer	352.37				
11/4/12 7:00 AM	11/4/12 8:00 AM	1	SRU Thermal Oxidizer	318.84				
11/4/12 8:00 AM	11/4/12 9:00 AM	1	SRU Thermal Oxidizer	294.70				
11/4/12 9:00 AM	11/4/12 10:00 AM	1	SRU Thermal Oxidizer	268.35				
11/14/12 1:00 AM	11/14/12 2:00 AM	1	SRU Thermal Oxidizer	252.95	This was directly related to a false reading on an instrument. The pH probe to the tail gas unit had plugged which prevented the signs of breakthrough from being observed by the operators.	In response to the incident at the East Plant Sulfur Recovery Unit, Operations reduced hydrotreater rates to a minimum in order to minimize Sulfur Dioxide emissions, and the Diesel and Gasoil Hydrotreaters were placed on internal circulation. Both East Plant Sour Water Strippers A & B were placed on Boiler Feed Water flush to eliminate the Sour Water Acid Gas load on the East Plant Sulfur Recovery Unit. C Train was placed on hot standby, removing the load from Tail Gas Treater Unit #2. Instrument technicians were called to the Refinery to double check the operation of the Thermal Oxidizer CEMs. The pH probe was fixed.		
11/14/12 2:00 AM	11/14/12 3:00 AM	1	SRU Thermal Oxidizer	287.53				
11/14/12 3:00 AM	11/14/12 4:00 AM	1	SRU Thermal Oxidizer	321.23				
11/14/12 4:00 AM	11/14/12 5:00 AM	1	SRU Thermal Oxidizer	353.02				
11/14/12 5:00 AM	11/14/12 6:00 AM	1	SRU Thermal Oxidizer	376.63				
11/14/12 6:00 AM	11/14/12 7:00 AM	1	SRU Thermal Oxidizer	390.50				
11/14/12 7:00 AM	11/14/12 8:00 AM	1	SRU Thermal Oxidizer	393.87				
11/14/12 8:00 AM	11/14/12 9:00 AM	1	SRU Thermal Oxidizer	386.77				
11/14/12 9:00 AM	11/14/12 10:00 AM	1	SRU Thermal Oxidizer	367.63				
11/14/12 10:00 AM	11/14/12 11:00 AM	1	SRU Thermal Oxidizer	351.54				
11/14/12 11:00 AM	11/14/12 12:00 PM	1	SRU Thermal Oxidizer	331.15				
11/14/12 12:00 PM	11/14/12 1:00 PM	1	SRU Thermal Oxidizer	301.65				
11/14/12 1:00 PM	11/14/12 2:00 PM	1	SRU Thermal Oxidizer	273.76				
11/21/12 7:00 PM	11/21/12 8:00 PM	1	SRU Thermal Oxidizer	270.36			This incident was a result of the post DHOUP plant configuration. The refinery's GOHT Amine and West Plant Acid Gas systems are now piped to the new North Plant (DHOUP) Sulfur Unit. The DHT Amine is directed to the EP Sulfur Unit. Shortly after start-up, the waste heat steam generator servicing the new North Plant Incinerator developed a hole that required immediate maintenance attention. As such, temporary lines were placed into service to allow acid gas and amine to be treated through the East Plant instead of shutting down multiple units. Upon switching the amines back, after the repair was completed, the difference in operating pressure between the amine systems caused amine to fill up the EP Amine and Acid Gas systems causing an entire shutdown of the EP Sulfur Unit. It should be noted that units were at minimum in anticipation of the switch. This event only occurred because of the amine switch that was required to fix the faulty new DHOUP equipment. Had the refinery not designed and installed piping to tie these units together there would have been multiple unit shutdowns in order to complete the repair.	The amine levels on the old DHT returned to normal levels and the DHT was cut back to minimum charge. The trains were brought back to normal acid gas to air ratios as needed and the TGTUs were restarted and acid gas diverted out of incinerator back to TGTUs.
11/21/12 8:00 PM	11/21/12 9:00 PM	1	SRU Thermal Oxidizer	300.68				
11/21/12 9:00 PM	11/21/12 10:00 PM	1	SRU Thermal Oxidizer	335.73				
11/21/12 10:00 PM	11/21/12 11:00 PM	1	SRU Thermal Oxidizer	370.89				
11/21/12 11:00 PM	11/22/12 12:00 AM	1	SRU Thermal Oxidizer	404.44				
11/22/12 12:00 AM	11/22/12 1:00 AM	1	SRU Thermal Oxidizer	438.02				
11/22/12 1:00 AM	11/22/12 2:00 AM	1	SRU Thermal Oxidizer	467.94				
11/22/12 2:00 AM	11/22/12 3:00 AM	1	SRU Thermal Oxidizer	478.69				
11/22/12 3:00 AM	11/22/12 4:00 AM	1	SRU Thermal Oxidizer	459.92				
11/22/12 4:00 AM	11/22/12 5:00 AM	1	SRU Thermal Oxidizer	438.38				
11/22/12 5:00 AM	11/22/12 6:00 AM	1	SRU Thermal Oxidizer	413.72				
11/22/12 6:00 AM	11/22/12 7:00 AM	1	SRU Thermal Oxidizer	386.34				
11/22/12 7:00 AM	11/22/12 8:00 AM	1	SRU Thermal Oxidizer	358.51				
11/22/12 8:00 AM	11/22/12 9:00 AM	1	SRU Thermal Oxidizer	332.97				
11/22/12 9:00 AM	11/22/12 10:00 AM	1	SRU Thermal Oxidizer	303.07				
11/22/12 10:00 AM	11/22/12 11:00 AM	1	SRU Thermal Oxidizer	271.89	On 12/09/12 through 12/10/12 the amine stripper overhead receiver level went high causing the knock out drum level to go high tripping the A and B trains and Tail Gas 1. This resulted in high SO2 at the East Plant Sulfur Recovery Unit (SRU).	In response to the incident at the East Plant Sulfur Recovery Unit, Operations reduced the distillate hydrotreater rates and restarted the units in order to minimize Sulfur Dioxide emissions.		
12/9/12 7:00 PM	12/9/12 8:00 PM	1	SRU Thermal Oxidizer	275.46				
12/9/12 8:00 PM	12/9/12 9:00 PM	1	SRU Thermal Oxidizer	305.63				
12/9/12 9:00 PM	12/9/12 10:00 PM	1	SRU Thermal Oxidizer	329.90				
12/9/12 10:00 PM	12/9/12 11:00 PM	1	SRU Thermal Oxidizer	341.72				
12/9/12 11:00 PM	12/10/12 12:00 AM	1	SRU Thermal Oxidizer	344.93				
12/10/12 12:00 AM	12/10/12 1:00 AM	1	SRU Thermal Oxidizer	323.47				
12/10/12 1:00 AM	12/10/12 2:00 AM	1	SRU Thermal Oxidizer	304.10				
12/10/12 2:00 AM	12/10/12 3:00 AM	1	SRU Thermal Oxidizer	286.58				
12/10/12 3:00 AM	12/10/12 4:00 AM	1	SRU Thermal Oxidizer	253.14				
12/10/12 4:00 AM	12/10/12 5:00 AM	1	SRU Thermal Oxidizer	251.96				
Total		54 hrs						

*The start time and end time are approximate.
**Emission limit is 250 ppm SO2 (12 hour average)

Excess Emission Report
Fourth Quarter 2012
Marathon Petroleum Company LP - Michigan Refining Division
Time Periods are Approximate

FCCU Regenerator CO

Start Date/Time*	End Date/Time*	Duration of Excess Emissions (hrs)	Equipment	Emissions (ppm 1 hr ave)**	Cause	Corrective Action
10/31/12 5:00 AM	10/31/12 6:00 AM	1	FCCU Regenerator	645.87	The refinery was started up following a planned plant-wide maintenance outage. The Fluidized Catalytic Cracking (FCC) Unit was started up, per procedure, and the following unavoidable excess emissions resulted. Start-up was delayed during this time period when a pinhole leak was discovered in a line.	The startup was performed per procedure. The leaking line was repaired and start-up was continued.
10/31/12 6:00 AM	10/31/12 7:00 AM	1	FCCU Regenerator	941.72		
10/31/12 7:00 AM	10/31/12 8:00 AM	1	FCCU Regenerator	1078.90		
10/31/12 8:00 AM	10/31/12 9:00 AM	1	FCCU Regenerator	1478.27		
10/31/12 9:00 AM	10/31/12 10:00 AM	1	FCCU Regenerator	1279.70		
10/31/12 10:00 AM	10/31/12 11:00 AM	1	FCCU Regenerator	1134.61		
10/31/12 11:00 AM	10/31/12 12:00 PM	1	FCCU Regenerator	614.57		
10/31/12 12:00 PM	10/31/12 1:00 PM	1	FCCU Regenerator	1096.70		
10/31/12 1:00 PM	10/31/12 2:00 PM	1	FCCU Regenerator	682.09		
10/31/12 2:00 PM	10/31/12 3:00 PM	1	FCCU Regenerator	918.37		
10/31/12 10:00 PM	10/31/12 11:00 PM	1	FCCU Regenerator	1060.61		
10/31/12 11:00 PM	10/31/12 12:00 AM	1	FCCU Regenerator	1325.28		
11/1/12 12:00 AM	11/1/12 1:00 AM	1	FCCU Regenerator	1000.00		
11/1/12 1:00 AM	11/1/12 2:00 AM	1	FCCU Regenerator	1000.00		
11/1/12 2:00 AM	11/1/12 3:00 AM	1	FCCU Regenerator	1000.00		
11/1/12 3:00 AM	11/1/12 4:00 AM	1	FCCU Regenerator	1188.23		
11/1/12 4:00 AM	11/1/12 5:00 AM	1	FCCU Regenerator	1038.51		
11/1/12 5:00 AM	11/1/12 6:00 AM	1	FCCU Regenerator	1255.39		
11/1/12 6:00 AM	11/1/12 7:00 AM	1	FCCU Regenerator	1381.18		
11/1/12 7:00 AM	11/1/12 8:00 AM	1	FCCU Regenerator	1094.08		
11/1/12 8:00 AM	11/1/12 9:00 AM	1	FCCU Regenerator	1000.00		
11/1/12 9:00 AM	11/1/12 10:00 AM	1	FCCU Regenerator	1307.31		
11/1/12 10:00 AM	11/1/12 11:00 AM	1	FCCU Regenerator	1620.07		
11/1/12 11:00 AM	11/1/12 12:00 PM	1	FCCU Regenerator	1478.52		
11/1/12 12:00 PM	11/1/12 1:00 PM	1	FCCU Regenerator	1736.75		
11/1/12 1:00 PM	11/1/12 2:00 PM	1	FCCU Regenerator	1260.14		
11/1/12 2:00 PM	11/1/12 3:00 PM	1	FCCU Regenerator	1226.51		
11/1/12 3:00 PM	11/1/12 4:00 PM	1	FCCU Regenerator	1202.60		
11/1/12 4:00 PM	11/1/12 5:00 PM	1	FCCU Regenerator	1213.87		
11/1/12 5:00 PM	11/1/12 6:00 PM	1	FCCU Regenerator	901.16		
11/1/12 9:00 PM	11/1/12 10:00 PM	1	FCCU Regenerator	864.79		
11/1/12 10:00 PM	11/1/12 11:00 PM	1	FCCU Regenerator	713.16		
11/2/12 3:00 AM	11/2/12 4:00 AM	1	FCCU Regenerator	1042.00		
11/2/12 4:00 AM	11/2/12 5:00 AM	1	FCCU Regenerator	1624.42		
11/2/12 5:00 AM	11/2/12 6:00 AM	1	FCCU Regenerator	1579.18		
11/2/12 6:00 AM	11/2/12 7:00 AM	1	FCCU Regenerator	1114.56		
11/2/12 7:00 AM	11/2/12 8:00 AM	1	FCCU Regenerator	1146.43		
11/2/12 8:00 AM	11/2/12 9:00 AM	1	FCCU Regenerator	1341.67		
11/2/12 9:00 AM	11/2/12 10:00 AM	1	FCCU Regenerator	592.64		
11/2/12 10:00 AM	11/2/12 11:00 AM	1	FCCU Regenerator	685.96		
11/2/12 11:00 AM	11/2/12 12:00 PM	1	FCCU Regenerator	1503.58		
11/2/12 12:00 PM	11/2/12 1:00 PM	1	FCCU Regenerator	1260.64		
11/2/12 1:00 PM	11/2/12 2:00 PM	1	FCCU Regenerator	1677.91		
11/2/12 2:00 PM	11/2/12 3:00 PM	1	FCCU Regenerator	1431.39		
11/2/12 3:00 PM	11/2/12 4:00 PM	1	FCCU Regenerator	536.48		
11/2/12 4:00 PM	11/2/12 5:00 PM	1	FCCU Regenerator	1314.47		
11/2/12 5:00 PM	11/2/12 6:00 PM	1	FCCU Regenerator	1363.31		
11/2/12 6:00 PM	11/2/12 7:00 PM	1	FCCU Regenerator	1061.48		
11/2/12 7:00 PM	11/2/12 8:00 PM	1	FCCU Regenerator	688.84		

Excess Emission Report
Fourth Quarter 2012
Marathon Petroleum Company LP - Michigan Refining Division
Time Periods are Approximate

FCCU Regenerator CO

Start Date/Time*	End Date/Time*	Duration of Excess Emissions (hrs)	Equipment	Emissions (ppm 1 hr ave)**	Cause	Corrective Action		
11/2/12 8:00 PM	11/2/12 9:00 PM	1	FCCU Regenerator	910.65	The refinery was started up following a planned plant-wide maintenance outage. The Fluidized Catalytic Cracking (FCC) Unit was started up, per procedure, and the following unavoidable excess emissions resulted. Start-up was delayed during this time period when a pinhole leak was discovered in a line.	The startup was performed per procedure.		
11/2/12 10:00 PM	11/2/12 11:00 PM	1	FCCU Regenerator	897.36				
11/2/12 11:00 PM	11/3/12 12:00 AM	1	FCCU Regenerator	922.46				
11/3/12 12:00 AM	11/3/12 1:00 AM	1	FCCU Regenerator	507.63				
11/3/12 1:00 AM	11/3/12 2:00 AM	1	FCCU Regenerator	1054.00				
11/3/12 2:00 AM	11/3/12 3:00 AM	1	FCCU Regenerator	611.76				
11/3/12 3:00 AM	11/3/12 4:00 AM	1	FCCU Regenerator	1000.00				
11/3/12 4:00 AM	11/3/12 5:00 AM	1	FCCU Regenerator	705.41				
11/3/12 5:00 AM	11/3/12 6:00 AM	1	FCCU Regenerator	1032.89				
11/3/12 7:00 AM	11/3/12 8:00 AM	1	FCCU Regenerator	860.59				
11/3/12 9:00 AM	11/3/12 10:00 AM	1	FCCU Regenerator	583.63				
11/3/12 4:00 PM	11/3/12 5:00 PM	1	FCCU Regenerator	551.55				
11/3/12 9:00 PM	11/3/12 10:00 PM	1	FCCU Regenerator	857.79				
11/3/12 11:00 PM	11/4/12 12:00 AM	1	FCCU Regenerator	501.04				
11/4/12 12:00 AM	11/4/12 1:00 AM	1	FCCU Regenerator	630.82				
11/4/12 1:00 AM	11/4/12 2:00 AM	1	FCCU Regenerator	693.09				
11/4/12 2:00 AM	11/4/12 3:00 AM	1	FCCU Regenerator	942.85				
11/4/12 3:00 AM	11/4/12 4:00 AM	1	FCCU Regenerator	963.30				
11/4/12 4:00 AM	11/4/12 5:00 AM	1	FCCU Regenerator	871.64				
11/4/12 5:00 AM	11/4/12 6:00 AM	1	FCCU Regenerator	692.49				
11/4/12 6:00 AM	11/4/12 7:00 AM	1	FCCU Regenerator	864.46				
11/4/12 7:00 AM	11/4/12 8:00 AM	1	FCCU Regenerator	550.97				
Total Operating Hours		71 hrs						
% Excess Emissions		1566.5						
		4.53						

*The start time and end time are approximate.
**Emission limit is 500 ppm CO (1 hour average)